

## REMARKS

Applicant respectfully submits that the foregoing amendments are sufficient to place the application in a condition for allowance. In support of the amendments and arguments made herein, Applicant submits as Exhibits "A" and "B", respectively, the Declaration of Dieter Sander and the Affidavit of Charles J. Long, Jr. Pursuant to 37 C.F.R. § 1.132, as filed in parent U.S. Patent Application Serial No. 08/961,440. Also submitted herewith as Exhibit "C" is the U.S. Patent Office Notice of Allowance in that application.

### Objections to the Drawings and Specification:

Applicant respectfully traverses the Examiner's objection to the drawings on the basis that they do not include reference character **37** as mentioned in the description, since Figure 5 of the drawings as filed shows reference character "**37**" and Figure 4 shows this character as broken down into its constituent components **37a-37c**. Applicant respectfully submits that the foregoing amendments to the drawings and specification are sufficient to overcome the Examiner's other objections thereto.

### Claim Rejections under 35 U.S.C. § 112:

Applicant has amended the claims to overcome the Examiner's rejection thereof under 35 U.S.C. § 112; specifically by: (i) changing the term "*elevated bridge portion*" to "*elevated area*" and eliminating the term "*annularly spaced*" while amending Claims 3 and 4 to clarify how the frangible elements can both be connected to and between the "*elevated areas*"; (ii) changing the term "*valve*" to "*inner annular sealing flange*"; (iii) changing the word "*define*" to "*defines*" in

Claim 2; (iv) eliminating the use of "*at least one*" and "(s)" in connection with the term "*frangible elements*"; (v) eliminating the use of the phrase "*of the circumference*" in connection with the term "*around at least a portion*"; (vi) consistently using the term "*tamper indicating*" in lieu of "*tamper evident*" and (vii) amending Claims 23 and 24 to describe the cooperation of the member attaching the tamper indicating ring to the skirt by requiring that there be "*at least one nonremovable member breakably attached to said tamper-indicating ring*" to "*cause said tamper indicating ring to break at a weakened area as said member pulls said tamper indicating ring upward to cause breakage of said frangible elements and fracture of said weakened area by separation of said portion of said tamper indicating ring attached to said member from said portion of said tamper indicating ring attached to said arcuate projection*" It should be noted that incorporation of items (i) through (iii) were sufficient to render the corresponding claims allowable in U.S. Patent Application Serial No. 08/961,440. (See Notice of Allowance in U.S. Patent Application Serial No. 08/961,440; appended hereto as Exhibit "C".)

The Examiner has rejected Claims 9-12 in the recitation of the phrase "*at least a portion*". Applicant respectfully traverses this rejection, as the specification clearly defines the recited "*annular bead*" by describing it as extending around "*at least a portion of the interior surface of*" the recited "*annular depending skirt*" (which inherently applies to the claimed "*inner annular sealing flange*" as well). (*See* Applicant's specification, at page 11, line 16 through page 12, line 14.) See MPEP § 608.01(o); 2173.01 ("*applicants are their own lexicographers*") (citing In re Swineheart, 439 F.2d 210, 160 USPQ 226 (CCPA 1971)). It should be noted that use of this language was sufficient to render the corresponding claims allowable in U.S. Patent Application Serial No. 08/961,440. (See Notice of Allowance in U.S. Patent Application Serial No.

08/961,440; appended hereto as Exhibit "C".)

The Examiner has also rejected Claims 17-20 as being indefinite for containing the alternative language "*eight or nine*". Applicant respectfully traverses this rejection, as claims containing alternative expressions using the word "or" are acceptable under 35 U.S.C. § 112; second paragraph. See MPEP 2173.05(h)(II)(citing In re Gaubert, 524 F.2d 1222, 187 USPQ 664 (CCPA 1975)). It should be noted that use of this language was sufficient to render the corresponding claims allowable in U.S. Patent Application Serial No. 08/961,440. (See Notice of Allowance in U.S. Patent Application Serial No. 08/961,440; appended hereto as Exhibit "C".)

The Examiner has also rejected the claims based on the assertion that they are not directed either to a closure alone or to a closure/container combination. Applicant respectfully traverses this rejection on the basis that this manner of claiming is perfectly acceptable, as demonstrated by the fact that other allowed patents in the bottle container/closure art have been allowed with claims reciting only a closure in the preamble yet being directed to features on the container neck in combination with the claimed closure. (See, e.g., Claim 18 of U.S. Patent No. 5,456,376). In addition, it is noted that Claim 25 and the claims dependent therefrom do in fact claim a closure/container combination.

Claim Rejections under 35 U.S.C. §§ 102 and 103:

The Examiner asserts that Claims 1-8, 21 and 22 are anticipated by Sander et al., U.S. Patent No. 5,487,481. The Examiner also asserts that Claims 1-3, 5, 7, 21 and 22 are anticipated by Rapeaud et al., French Patent No. 1,536,459.

The Examiner also asserts that Claims 1-10, 21 and 22 are obvious in light of the

combination of Sander with Csaszar, U.S. Patent No. 4,343,408. The Examiner also asserts that Claims 11-16 are obvious in light of the combination of Sander and Csaszar with Montgomery, U.S. Patent No. 5,738,231. The Examiner has also asserted that Claims 11 and 13 are obvious in light of the combination of Sander with Brownbill, U.S. Patent No. 4,196,818. The Examiner has also asserted that Claims 11, 13 and 14 are obvious in light of the combination of Sander with Montgomery. The Examiner has also asserted that Claims 17 and 19 are obvious in light of the combination of Sander with Repp et al., U.S. Patent No. 5,593,055. The Examiner has also asserted that Claims 18 and 20 are obvious in light of the combination of Sander and Csaszar with Montgomery and Repp et al. The Examiner has also asserted that Claims 1-8 and 21-24 are obvious in light of the combination of Beck, U.S. Patent No. 5,215,204 with Kern, U.S. Patent No. 4,448,319. Applicant respectfully traverses all of these rejections for the following reasons:

As explained in corresponding U.S. Patent Application Serial No. 08/961,440 , any rejection based on Sander is inapplicable because it does not disclose a container closure system capable of permitting snap-on application of the closure to the container during initial installation as required by the instant claims. Instead, this reference discloses a closure which can only be screwed onto a container and thus does not enable the claim requirement for "*said depending skirt having an internal thread configuration adapted for engaging an external thread configuration on the neck portion of said container by snap-on application during initial installation of said closure to said container neck*". (See Sander; at column 3, lines 10-26. See also Declaration of Dieter Sander, appended hereto as Exhibit "A". See also Affidavit Pursuant to 37 C.F.R. § 1.132 of Charles J. Long, Jr.; appended hereto as Exhibit "B", at paragraph 2(b).)

Moreover, all claim rejections based on Rapeaud (see Fig.1), Csaszar (see col. 2, line 30-

52; col. 4, line 53 - col. 5, line 13), Montgomery (see col. 1, line 56 - col. 2, line 9; col. 4, lines 43-54) and Brownbill (see col.6, lines 42-50) are improperly asserted for these same reasons, as these references teach a closure which is initially installed by screw on action instead of a snap-on procedure. (See Affidavit Pursuant to 37 C.F.R. § 1.132 of Charles J. Long, Jr.; appended hereto as Exhibit "B", at paragraph 2(c).)

In addition, and contrary to the Examiner's assertion, Kern does not teach or enable a "snap-on" closure as claimed in the instant application to require *"an annular depending skirt extending from said top portion, said depending skirt having an internal thread configuration adapted for **engaging** an external thread configuration on the neck portion of said container by snap-on application during initial installation of said closure to said container neck"*. The teachings of Kern clearly indicate that it cannot be completely installed by snap-on application; instead, it only allows the threads of the closure to snap *"over the **first turn**"* of the bottle *"so that the **screw cap** takes up a proper level position and can be properly tightened on to the bottle or container"* by an additional screw-on action. (See Kern; at Abstract; and at col.1, line 35 - col.2, line 62). Moreover, Kern discloses that a gap 14 must exist in the screw-thread of the cap or it will not be possible to snap the cap onto the container. (See Kern; at col.1, line 35 - col.2, line 62; and at column 3, lines 25-63). (See Affidavit Pursuant to 37 C.F.R. § 1.132 of Charles J. Long, Jr.; appended hereto as Exhibit "B", at paragraph 2(d).)

The amendments to Claims 23 and 24 distinguish over Beck, which does not teach a tamper ring retaining feature A/B as shown in Applicant's Figure 5, which corresponds to the claimed *"at least one **nonremovable** member breakably attached to said tamper-indicating ring"* to *"cause said tamper indicating ring to break at a weakened area as said member pulls said tamper*

*indicating ring upward to cause breakage of said frangible elements and fracture of said weakened area by separation of said portion of said tamper indicating ring attached to said member from said portion of said tamper indicating ring attached to said arcuate projection."*

Instead, Beck teaches a tether **18/118** which is not (i) nonremovable from the closure and (ii) does not assist in breaking tamper indicating ring **16/116** by pulling the tamper indicating ring upward, but instead only functions to retain the ring after it is broken. (See Beck, at column 4, lines 1-33; and at column 5, lines 14-29.)

Separate and independent from the improper combination of the references relied upon by the Examiner for rejecting the instant claims, it should also be noted that none of the cited art teaches the requirement of Claims 7 and 8 for *"at least one projection configured for engaging said frangible elements to disconnect said closure from said tamper evident band upon twist-off removal of said closure from said container neck"*, which was one of the reasons for allowance of corresponding U.S. Patent Application Serial No. 08/961,440. (See Notice of Allowance in U.S. Patent Application Serial No. 08/961,440; appended hereto as Exhibit "C".) Further, in addition to lacking the "projection" of Claim 7, Rapeaud does not teach the requirement of Claim 5 for *"frangible elements ... of a height greater than that of said known height of said elevated areas"*. The lack of these features is confirmed by the Examiner's failure to reject Claims 6 and 8 based on Rapeaud, even though they contain the same limitations as Claims 5 and 7, respectively. Moreover, the rejection of Claims 19 and 20 on the basis of Repp et al. does not address the "segmented" aspect of the thread leads as claimed. Finally, Sander does not teach the requirement of Claim 22 for *"a locking member extending radially inward from said tamper indicating ring at an angle to a plane normal with said tamper indicating ring"*.

It is not possible to simply extrapolate the features of these references relied on by the Examiner to a cap designed for *snap-on initial installation* because completely different types of forces are encountered during screw-on installation that cannot render the closures taught by these references capable of functioning in a snap-on environment. Thus, the prior art of record cannot anticipate<sup>1</sup> or render obvious<sup>2</sup> Claims 1 or 25 or any other pending claim of the present

---

<sup>1</sup> See MPEP § 2131 (citing In re Bond, 910 F.2d 831, 832 (Fed.Cir. 1990))(for a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be **identically shown** in that reference, and the elements must be arranged as in the claim under review); In re Paulsen, 30 F.3d 1475, 1478-79 (Fed.Cir. 1994)(to serve as the basis for a 35 U.S.C. § 102 rejection, the relied upon reference must contain **all** the limitations of the rejected claim); PPG Industries v. Guardian Industries Corp., 75 F.3d 1558, 1566, 37 USPQ.2d 1618, 1624 (Fed.Cir. 1996)("[t]o anticipate a claim [under 35 U.S.C. § 102] a reference must disclose every element of the challenged claim **and** enable one skilled in the art to make the anticipating subject matter").

<sup>2</sup> See Motorola v. Interdigital Technology Corp., 121 F.3d 1461, 1471, 43 USPQ.2d 1481, 1489 (Fed.Cir. 1997)("[i]n order to render a claimed apparatus or method obvious, the prior art must **enable** one skilled in the art to **make and use** the apparatus or method")(citing Beckman Instruments, Inc. v. Productukter AB, 892 F.2d 1547, 1551, 13 USPQ.2d 1301, 1304 (Fed.Cir. 1989)). See W.L. Gore & Associates v. Garlock, Inc., 721 F.2d 1540, 1552-53 (Fed.Cir. 1983)("proceeding **contrary** to [i.e., "**teaching away**" from] the accepted wisdom in the art . . . is "**strong evidence of nonobviousness**"); Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1578-80, 42 USPQ.2d 1378, 1383-84 (Fed.Cir. 1997)(same). See also In re Gordon, 733 F.2d 900, 901-02, 221 USPQ 1125 (Fed.Cir. 1984)(reversing an obviousness rejection sustained by the Board of Appeals and Interferences on the basis that "[the relied-upon reference] **teaches away** from the board's proposed modification")(alteration in original); In re Fine, 837 F.2d 1071, 1074-76, 5 USPQ.2d 1596 (Fed.Cir. 1988)(same). See MPEP § 2143.01 ("if the proposed modification or combination of the prior art would **change the principle of operation** of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious"). See also In re Gordon, *supra*, 733 F.2d at 901-02 (reversing an obviousness rejection sustained by the Board of Appeals and Interferences on the basis that "if [the prior art reference were modified in the manner suggested] it would be rendered **inoperable for its intended purpose**. . . . In effect, [the relied-upon reference] **teaches away** from the board's proposed modification")(alteration in original).

application, which all depend therefrom<sup>3</sup>, because they are all based in whole or in part on the improper combination of these references which are initially threaded onto a container and thus do not teach or enable the claimed limitation requiring "*said depending skirt having an internal thread configuration adapted for engaging an external thread configuration on the neck portion of said container by snap-on application during initial installation of said closure to said container neck*".<sup>4</sup>

In summary, the Examiner as a matter of law has not provided sufficient evidence to support his burden of establishing a *prima facie* case of unpatentability. Instead, in relying purely on personal opinion to draw the conclusion that the claimed features would have been anticipated or obvious without providing evidence in the prior art to support that conclusion -- especially evidence contained within the disclosure of any of the relied upon references i.e., by identifying with particularity relevant portions of the description which show that the modifications necessary to arrive at the claimed invention starting from these teachings would be desirable or could even be accomplished -- the Examiner has engaged in the type of "hindsight

---

<sup>3</sup> See *In re Fine*, supra, 837 F.2d at 1076 (dependent claims are allowable if independent claims from which they depend are allowable).

<sup>4</sup> See MPEP § 2141.01(a) ("*in order to rely on a reference as a basis for rejection . . . the reference must . . . be in the field of applicant's endeavor or . . . reasonably pertinent to the problem with which the inventor was concerned*"); see also MPEP § 904.01(c) (determination of analogous art "*depends on the necessary essential function or utility of the subject matter covered by the claims*"). See also *Heidelberger Druckmaschinen AG v. Hantscho Commercial Products*, 21 F.3d 1068, 1071-72 30 USPQ.2d 1377, 1379-80 (Fed. Cir. 1994) (holding relied-upon references did not support rejection of obviousness because the trial court "*identified no reference that taught or suggested that [the elements of the claims] might be adapted to the [claimed combination] . . . when the patented invention is made by combining known components to achieve a new system, the prior art must provide a suggestion or motivation to make such a combination*") (alteration in original).



reconstruction" that is an impermissible basis for establishing unpatentability.<sup>5</sup>

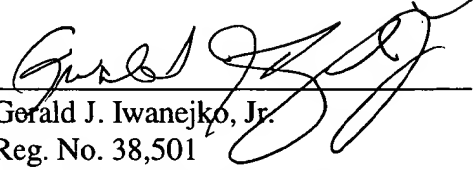
---

<sup>5</sup> See MPEP § 2142 ("[w]ith regard to rejections under 35 U.S.C. § 103, **the examiner must provide evidence** which as a whole shows . . . [that] the reference teachings establish a prima facie case of obviousness"); MPEP § 2143.01 ("a statement that modifications of the prior art to meet the claimed invention would have been '**well within the ordinary skill of the art**' at the time the claimed invention was made . . . is **not** sufficient to establish a prima facie case of obviousness without some objective **reason** to combine teachings of the references")(citing Ex parte Levengood, 28 USPQ.2d 1300)(Bd.Pat.App.&Inter. 1993)("As adapted to ex parte procedure, Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966)] has been interpreted as continuing to place the burden of proof on the Patent Office which requires it to produce the factual basis for [its] rejection of an application under 35 U.S.C. § 102 or 103. . . . [A]n examiner **cannot** establish obviousness by locating references which describe various aspects of a patent applicant's invention **without also providing evidence of the motivating force** which would impel one skilled in the art to do what the patent applicant has done" (alteration in original))(also citing In re Fine, *supra*, 837 F.2d at 1074-76 ("[t]he relied-upon references] disclose at most, that one skilled in the art might find it **obvious to try** the claimed invention. But whether a particular combination might be 'obvious to try' is **not** a legitimate test of patentability. The Examiner relies on hindsight to reach his obviousness determination. But this court has said '[t]o imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher'")(citing W.L. Gore & Associates v. Garlock, Inc., *supra*). See also In re Laskowski, 871 F.2d 115, 116, 10 USPQ.2d 1397, 1398 (Fed.Cir. 1989)(reversing Board of Appeals and Interferences affirmance of rejection based on obviousness since "the mere fact that the prior art **could** be so modified would **not** [make] the modification obvious unless the prior art suggested the **desirability** of the modification"); In re Fritch, 972 F.2d 1260, 1265-66, 23 USPQ.2d 1780 (Fed.Cir. 1992)(same). See also In Re Bond, 910 F.2d 831, 834-35, 15 USPQ.2d 1566 (Fed.Cir. 1990) (rejecting a Board of Appeals and Interferences finding of obviousness where "critical differences exist between the claimed invention and the [relied-upon] prior art")(alteration in original).

For the foregoing reasons, reconsideration and allowance of Claims 1-25 is respectfully requested.

Respectfully submitted,  
CHARLES J. LONG, JR.

By



Gerald J. Iwanejko, Jr.  
Reg. No. 38,501  
COHEN & GRIGSBY, P.C.  
11 Stanwix Street  
Fifteenth Floor  
Pittsburgh, PA 15222  
(412) 297-4900  
Attorneys for Applicant

IN THE UNITED STATES PATENT AND TRADE MARK OFFICE

In re Application of:

Charles J. Long, Jr.

Serial No.: 08/961,440

Filed: October 30, 1997

Examiner: Hylton, Robin

Our Ref: 97-106

Commissioner of Patents and Trademarks  
Washington DC 20231

Sir/Madam:

SNAP-ON SCREW-OFF  
CLOSURE



October 14, 1998

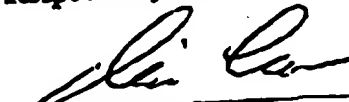
RECEIVED  
FEB 15 2000  
TECHNOLOGY CENTER ST00

**AFFIDAVIT PURSUANT TO 37 C.F.R. 1.132**

I, Dieter Sander, state the following facts, as personally known to me:

1. I am an inventor of the subject matter disclosed in U.S. Patent No. 5,487,481.
2. The closure disclosed in U.S. Patent No. 5,487,481 cannot be installed by snapping it onto a container, because it is designed only for screw-on application and screw-off removal.

Respectfully Submitted,

  
Dieter Sander

Sworn to and subscribed before me  
this \_\_\_\_\_ day of October, 1998.

\_\_\_\_\_  
Notary Public

NO. 0378 P. 1/1

JAN 12 '98 NO. 0378 P. 2/2

OCT 20 1998 1:11PM

OCT 20 1998 3:28PM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Charles J. Long, Jr.

Serial No.: 08/961,440

Filed: October 30, 1997

Group Art Unit: 3727

Examiner: Shoap, Alan/Hylton, Robin

Our Ref: 97-106

SNAP-ON SCREW-OFF  
CLOSURE



July 26, 1999

AFFIDAVIT PURSUANT TO 37 C.F.R. 1.132

I, Charles J. Long, Jr., state the following facts, as personally known to me, as evidence of the unobviousness of the invention claimed in U.S. Patent Application Serial No. 08/961,440:

1. I am employed as an officer of the assignee of U.S. Patent Application Serial No. 08/961,440 and I am the inventor of the subject matter disclosed and claimed therein. Currently, some structural aspects of the claimed invention are featured in a product being prepared for commercial distribution by the assignee known as the "IPEC Snap-Screw Closure"

2. As the inventor of the subject matter disclosed and claimed in U.S. Patent Application Serial No. 08/961,440, it is my opinion, as one skilled in the art of designing and manufacturing threaded tamper indicating container closures configured for snap-on or screw-on application to a container and screw-off removal, that one so skilled would not have looked to

TECHNOLOGY CENTER 700

FEB 15 2000

RECEIVED

the references relied upon by the U.S. Patent Office to reject the claims of the aforesaid application, for the following reasons:

(a) U.S. Patent No. 5,593,055 to Repp is inapplicable because it does not enable use of a "frangible element" connecting the tamper evident band to the closure as claimed by the present invention, but instead shows a line of weakness 73 for this purpose. In fact, Repp teaches away from such a requirement, because it teaches that lower skirt 65 will not be removed merely by "screw-off" action of the closure with respect to the container neck as is made possible by the claimed "frangible elements" of the present invention. Instead, a tear tab 74 must first be used to rupture line of weakness 73 to tear the lower skirt 65 away from the closure instead of being removed by a screw-off action. The claimed invention operates under none of these constraints.

(b) U.S. Patent No. 5,487,481 to Sander is inapplicable because Sander does not disclose a container closure system capable of permitting snap-on application of the closure to the container during initial installation as required by the instant claims. (See Sander; at column 3, lines 18-26. See also Declaration of Dieter Sander, appended as Exhibit "A" to Applicant's Amendment dated November 23, 1998.) Instead, this reference discloses a closure which can only be screwed onto a container and therefore cannot enable the claimed annular depending skirt extending from said top portion, said depending skirt having an internal thread configuration adapted for engaging an external thread configuration on the neck portion of said container by snap-on application during initial installation of said closure to said container neck. Furthermore, even if Sander were considered an applicable reference, it does not teach or enable the claimed container neck containing at least one projection configured for engaging said

frangible element(s) to disconnect said closure from said tamper evident band upon twist-off removal of said closure from said container neck, as flange 19 shown in Figure 6 of Sander does not in fact engage and break frangible elements 17, but instead engages arcuate projections 18 located on the surface of annular ring 16 below frangible elements 17 to create a restraining force on the annular ring 16 that causes breakage of the frangible elements 16.

(c) U.S. Patent No. 4,343,408 to Csaszar and U.S. Patent No. 5,738,231 to Montgomery are also inapplicable to the claimed invention for the same reasons as with respect to Sander, because Csaszar (see col. 2, line 30-52; col. 4, line 53 - col. 5, line 13) and Montgomery (see col. 1, line 56, col. 2, line 9; col. 4, lines 43-54) are both initially installed by screw on action instead of a snap-on procedure, and therefore do not teach or enable the claimed annular depending skirt extending from said top portion, said depending skirt having an internal thread configuration adapted for engaging an external thread configuration on the neck portion of said container by snap-on application during initial installation of said closure to said container neck.

(d) U.S. Patent No. 4,448,319 to Kern is also inapplicable because it does not teach a "snap-on" closure as claimed in the instant application and therefore does not enable the claimed annular depending skirt extending from said top portion, said depending skirt having an internal thread configuration adapted for engaging an external thread configuration on the neck portion of said container by snap-on application during initial installation of said closure to said container neck. The teachings of Kern first indicate that it does not operate entirely by snap-on application; instead, it only allows the threads of the closure to "snap over the first turn" of the bottle, indicating that an additional screw-on action is required if more than one bottle thread

turn exists. Moreover, Kern discloses that a gap **14** must exist in the screw-thread of the cap or it will not be possible to snap the cap onto the container.

(e) U.S. Patent No. 5,699,924 to Mascio et al. is also an inapplicable reference since it relates to a pour spout assembly with a push-pull cap and not a threaded snap-on screw-off closure. Furthermore, the only shown structure protruding from the container neck is snap-lock ring **16**, which does not engage and break the frangible bridges **38** to allow separation of the tamper-evident band from the remainder of the closure during twist-off removal to enable the claimed container neck [that] contains at least one projection configured for engaging said frangible element(s) to disconnect said closure from said tamper evident band upon twist-off removal of said closure from said container neck. Instead snap-lock ring **16** engages the bumpers **36** formed on the top edge of the tamper band **33** to create a restraining force on the band **33** that causes breakage of the bridges **38** as the pour spout **26** is pulled directly upward.

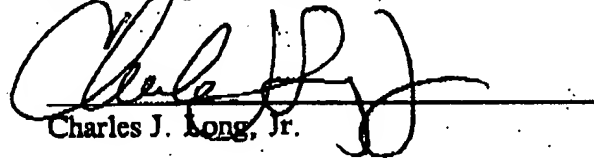
(f) U.S. Patent No. 5,685,443 to Taber et al., also does not enable the use of "projections" to break frangible elements **36**, **97**, **115** or **150**. Instead, they are broken in the conventional method shown in prior art such as Sander et al., i.e., by the engagement of structures **50** with **49**, **96** with **88**, or **116** with **105** located below frangible elements **36**, **97**, **115** or **150** to create a restraining force on the annular ring that causes breakage of the frangible elements. Thus, Taber et al. adds nothing to the art of record to obviate the claimed "projections".

3. Due to the structural and operational differences described in Paragraph 2 above, one skilled in the art of designing and manufacturing threaded tamper indicating container

container would not have looked to the teachings of Repp, Kern, Sander, Csaszar, Montgomery, Mascio and/or Taber et al., either alone or in any combination with each other or the other prior art of record, for guidance in developing the design embodied in the invention claimed in U.S. Patent Application Serial No. 08/961,440, since there is no evidence contained within the disclosure of any of these reference that would enable one skilled in the art to make the modifications necessary to arrive at the claimed invention starting from their teachings, or that such modifications would be desirable or could even be accomplished.

It is thus my opinion that the invention claimed in U.S. Patent Application Serial No. 08/961,440 is unobvious and therefore patentable over the prior art.

Respectfully Submitted,



Charles J. Long, Jr.



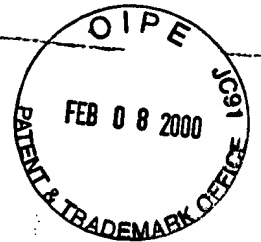


UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

NOTICE OF ALLOWANCE AND ISSUE FEE DUE

001271221

THOMAS J. WETZEL  
TITUS & MCDONNELL  
FOUR GATEWAY CENTER  
20TH FLOOR  
PITTSBURGH, PA 15222



APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
08/903,410	10/30/97	010	HO/TAL, R	3/27 12/21/99
First Named Applicant	LUNA,	35 USC 154(d) term ext. = 0.Days.		

TITLE OF INVENTION SNAP-ON SCREW-OFF CLOSURE FOR USE IN COMBINATION WITH A CONTAINER (AS AMENDED)

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
3 97196	215-252.000	699	UTILITY	YES	\$695.00	03/21/00

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.**

**THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.**

**HOW TO RESPOND TO THIS NOTICE:**

**I. Review the SMALL ENTITY status shown above.**

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

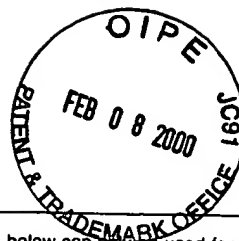
**II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.**

**III. All communications regarding this application must give application number and batch number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.**

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

## PART B—ISSUE FEE TRANSMITTAL

Complete and mail this form, together with applicable fees, to: **Box ISSUE FEE**  
**Assistant Commissioner for Patents**  
**Washington, D.C. 20231**



**MAILING INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE. Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Issue Fee Receipt, the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

THOMAS C WETTACH  
 TITUS & MCCONOMY  
 FOUR GATEWAY CENTER  
 20TH FLOOR  
 PITTSBURGH PA 15222

QM12/1221

Note: The certificate of mailing below can only be used for domestic mailings of the Issue Fee Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing.

### Certificate of Mailing

I hereby certify that this Issue Fee Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above on the date indicated below.

(Depositor's name)

(Signature)

(Date)

APPLICATION NO.	FILING DATE	TOTAL CLAIMS	EXAMINER AND GROUP ART UNIT	DATE MAILED
08/961,440	10/30/97	018	HYLTON, R	3727 12/21/99
First Named Applicant	LUNG,	35 USC 154(b) term ext. = 0 Days.		

**TITLE OF INVENTION** SNAP-ON SCREW-OFF CLOSURE FOR USE IN COMBINATION WITH A CONTAINER (AS AMENDED)

ATTY'S DOCKET NO.	CLASS-SUBCLASS	BATCH NO.	APPLN. TYPE	SMALL ENTITY	FEE DUE	DATE DUE
3 97106	215-252.000	F99	UTILITY	YES	\$605.00	03/21/00

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Use of PTO form(s) and Customer Number are recommended, but not required.

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47) attached.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 \_\_\_\_\_  
 2 \_\_\_\_\_  
 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  
**PLEASE NOTE:** Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the PTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY & STATE OR COUNTRY)

Please check the appropriate assignee category indicated below (will not be printed on the patent)

☐ individual ☐ corporation or other private group entity ☐ government

4a. The following fees are enclosed (make check payable to Commissioner of Patents and Trademarks):

☐ Issue Fee  
☐ Advance Order - # of Copies \_\_\_\_\_

4b. The following fees or deficiency in these fees should be charged to:

DEPOSIT ACCOUNT NUMBER \_\_\_\_\_  
 (ENCLOSE AN EXTRA COPY OF THIS FORM)  
☐ Issue Fee  
☐ Advance Order - # of Copies \_\_\_\_\_

The COMMISSIONER OF PATENTS AND TRADEMARKS IS requested to apply the Issue Fee to the application identified above.

(Authorized Signature)

(Date)

NOTE: The Issue Fee will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the Patent and Trademark Office.

**Burden Hour Statement:** This form is estimated to take 0.2 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND FEES AND THIS FORM TO: Box Issue Fee, Assistant Commissioner for Patents, Washington D.C. 20231

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMIT THIS FORM WITH FEE

RECEIVED  
 FEB 15 2000  
 CHIEF INFORMATION CENTER 3700

# Notice of Allowability

Application No.  
**08/961,440**

Applicant(s)  
**Long, Jr.**

Examiner  
**Robin A. Hylton**

Group Art Unit  
**3727**



All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

☒ This communication is responsive to applicant's after final amendment filed December 10, 1999.

☒ The allowed claim(s) is/are 2-6, 9, 11, 13, 14, 17, 19, 21-23, and 26-28.

☐ The drawings filed on \_\_\_\_\_ are acceptable.

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE **THREE MONTHS** FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

☒ Applicant MUST submit NEW FORMAL DRAWINGS

☐ because the originally filed drawings were declared by applicant to be informal.

☒ including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. 3.

☒ including changes required by the proposed drawing correction filed on Jul 26, 1999, which has been approved by the examiner.

☐ including changes required by the attached Examiner's Amendment/Comment.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

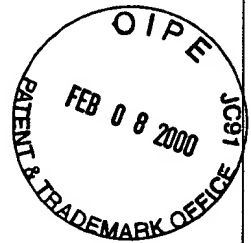
☐ Notice of Informal Patent Application, PTO-152

☒ Interview Summary, PTO-413

☒ Examiner's Amendment/Comment

☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

☐ Examiner's Statement of Reasons for Allowance



RECEIVED  
FEB 15 2000  
BIOLOGY CENTER 3700



### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gerald J. Iwanejko on December 10, 1999.

2. The application has been amended as follows:

#### IN THE SPECIFICATION:

On page 2, line 19, page 3, line 20, and page 4, line 16, "valve" has been changed to --inner annular sealing flange --.

On page 5, line 22, "valve" has been changed to -- flange --.

On page 8, lines 6 and 7, "annular valve" has been changed to -- inner annular sealing flange --.

On page 8, lines, 11,12,13,15, "valve" has been changed to -- inner annular sealing flange --.

3. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on July 26, 1999, have been approved by the examiner.

4. The following is an examiner's statement of reasons for allowance: the prior art does not disclose a container comprising at least one projection configured for engaging at least one frangible element of a closure tamper band to disconnect the tamper evident band from the closure upon twist-off removal of the closure from the container.

RECEIVED  
FEB 15 2000  
TECHNOLOGY CENTER  
3727

Art Unit: 3727

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

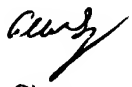
5. In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at (703)305-3579. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into Group 3720 will be promptly forwarded to the examiner.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robin Hylton whose telephone number is (703) 308-1208. The examiner can normally be reached on Monday - Friday from 9:00 a.m. to 5:00 p.m. (Eastern time).

If in receiving this Office Action it is apparent to applicant that certain documents are missing, e.g., copies of references cited, form PTO-1449, form PTO-892, etc., requests for copies of such papers should be directed to Ebony Smith at (703)305-3570.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148. The fax phone number for this Group is (703) 305-3579.

Robin A. Hylton/rah  
December 10, 1999



Allan N. Shoap  
Supervisory Patent Examiner  
Group 3700

RECEIVED  
FEB 15 2000  
TECHNOLOGY CENTER 3700

# Interview Summary

Application No.

08/961,440

Applicant(s)

Long, Jr.

Examiner

Robin A. Hylton

Group Art Unit

3727



All participants (applicant, applicant's representative, PTO personnel):

(1) Robin A. Hylton

(3) \_\_\_\_\_

(2) Gerald J. Iwanejko

(4) \_\_\_\_\_

Date of Interview Dec 10, 1999Type: ☒ Telephonic ☐ Personal (copy is given to ☐ applicant ☐ applicant's representative).Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description:Agreement ☒ was reached. ☐ was not reached.Claim(s) discussed: None

Identification of prior art discussed:

None

Description of the general nature of what was agreed to if an agreement was reached, or any other comments:

It was agreed upon to provide proper antecedent basis in the specification for new claim language "inner annular sealing flange". This change had been previously discussed as a replacement for the term "valve" since sealing flange is a more accurate descriptor for the structure.

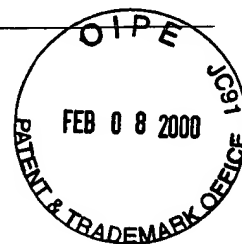
(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

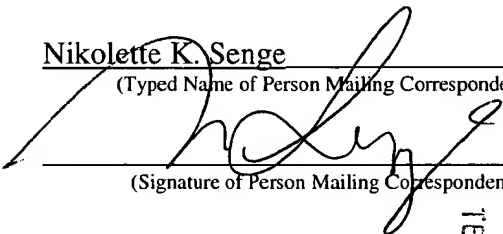
1. ☒ It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph above has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a response to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW.

2. ☐ Since the Examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the interview unless box 1 above is also checked.

Examiner Note: You must sign and stamp this form unless it is an attachment to a signed Office action.

RECEIVED  
FEB 15 2000  
TECHNOLOGY CENTER  
300

<b>CERTIFICATE OF MAILING BY "EXPRESS MAIL"</b> (37 C.F.R. § 1.10)			<b>Docket No.</b> 97-106 CIP
<b>In Re Application Of:</b> Charles J. Long, Jr.			
<b>Serial No.</b> 09/450,690	<b>Filing Date</b> 09/02/1998	<b>Examiner</b> Hylton, R.	<b>Group Art Unit</b> 3727
<b>Title:</b> SNAP-ON SCREW-OFF CLOSURE			
<p>I hereby certify that this <u>PETITION FOR EXTENSION OF TIME, AMENDMENT TRANSMITTAL SHEET, AMENDMENT, DRAWINGS and TWO COHEN &amp; GRIGSBY CHECKS IN THE AMOUNTS OF \$184.00 &amp; \$55.00</u> is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 in an envelope addressed to: The Commissioner of Patents and Trademarks, Washington, D.C. 20231-0001 on <u>February 4, 2000</u>.</p> <div style="text-align: right;"><div><div>Nikolette K. Senge</div><div>(Typed Name of Person Mailing Correspondence)</div><div></div><div>(Signature of Person Mailing Correspondence)</div><div>EL515053710US</div><div>("Express Mail" Mailing Label Number)</div></div><div style="text-align: right; margin-top: 20px;"><div>RECEIVED</div><div>FEB 15 2000</div><div>TECHNOLOGY CENTER 3700</div></div></div>			